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Georgia Environmental Protection Division
Coastal District
400 Commerce Center Drive
Brunswick, Georgia 31523-8251
Phone: 912/264-7284
Judson H. Turner, Director

January 30, 2013

Mr. Keith Morgan, Executive Director
Brunswick-Glynn County Joint Water and Sewer Commission
2909 Newcastle Street
Brunswick, Georgia 31521

RE: **Compliance Evaluation Inspection**
Saint Simons Island WPCP
NPDES Permit GA0021521
Glynn County

Dear Mr. Morgan:

On December 7, 2012, the Georgia Environmental Protection Division (EPD) performed a Compliance Evaluation Inspection (CEI) of the above referenced facility for compliance with the Georgia Water Quality Act, the Rules for Water Quality Control, and the facility's NPDES permit. Mr. Alvin Lang, WW Treatment Supervisor, represented the Saint Simons Island Plant during the inspection. A copy of the inspection report is enclosed for your review and files.

There were no noted violations during the inspection. The Division appreciates the Plant's efforts in diligent pursuit of improved water quality from the Plant. The excellent achievement of high quality effluent reflects this effort. Should you have any questions, please contact me at (912) 264-7284.

Sincerely,

Kelly Kutrufis
Environmental Specialist
Coastal District Office

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cc: CDS, WQ Files

Georgia Department of Natural Resources

Environmental Protection Division
Municipal Compliance Evaluation Inspection

Name of Permittee: Saint Simons Island WPCP GA0021521

Address of Permittee: 601 Palmetto Street

Date of Inspection: 12-7-12

Responsible Official: Keith Morgan

Title: Executive Director

Phone Number: 912-261-7110

Facility Representative Name: Mark Ryals

Title: Superintendent

Certification: WW1-014424

Phone Number: 912-717-0516

EPD Representative Name: Kelly Kutrufis

EPD Title: Environmental Specialist

Type of Treatment: Activated Sludge

Design Flow (MGD): 10 MGD

Receiving Waters: Dunbar Creek

Facility Process Description: Conventional Activated Sludge

Comments:

Documentation, Recordkeeping and Reporting

I. Permit Sampling, Monitoring and Reporting:

1. Facility has a copy of the current permit? Yes
2. Does the permit contain the correct address of the facility? Yes
3. Number and location of discharge(s) are the same as described in the permit? Yes
4. Are all discharges permitted? Yes
5. Permittee properly notified the Division of any modifications to the discharge? N/A
6. What is the current status of the permit? (active, expired, or extended)

   Active

7. Is the permittee meeting all compliance schedules in the permit? Yes
   a. Watershed Assessment/Protection Plan? Yes
   b. WET Test? N/A
   c. Priority Pollutant Scan? N/A
   d. Construction? N/A
   e. Effluent Limits? N/A
   f. Long Term Biochemical Oxygen Demand? N/A
   g. Other:
   h. If not, describe:
8. Does the facility currently receive unapproved indirect nondomestic waste, as defined in 391-3-6-.06(2)(i)? No
9. Facility has a written monitoring plan and schedule? Yes
10. Quarterly, semi-annual, and annual analyses are performed in the month specified in the permit? Yes
11. Monitoring records and original strip chart recording of flow, pH, DO or other parameters which are continuously monitored are maintained for a minimum of three years except sludge records which are maintained for at least five years? Yes
12. Laboratory equipment calibration and maintenance records kept? Yes
13. Influent flow is measured before all return lines? Yes
    a. If not, describe:

14. Effluent flow is measured after all return lines? Yes
    a. If not, describe:

15. Flow measuring device is calibrated at the frequency described in the permit? Yes

16. Secondary flow instruments (totalizers, ultrasonic meters, magmeters, recorders, etc.) are properly operated and maintained? Yes

17. DMR data review:
    a. Are the DMR's routinely signed by the responsible official? Yes
    b. Is data accurately transferred from bench sheets to DMR? Yes
    c. Are the "Quantity or Loading" columns on the DMRs filled in with data in kg/day? Yes
    d. Is fecal coliform bacteria reported as the geometric mean? Yes
    e. Are the monthly averages, with the exception of fecal coliform bacteria, reported as the arithmetic mean? Yes
    f. Are weekly averages, with the exception of fecal coliform bacterial, reported as the arithmetic mean of values for samples collected during the 7 day period defined in the permit? Yes
    g. Are the "frequency of analysis" and "type sample" columns filled in? Yes
    h. Are BOD and TSS percent removal calculated and reported correctly? Yes
    i. Does the permittee report "not detect" when a parameter is analyzed below the detection limit? Yes
    j. Does the permittee include the detection limit on the DMR? Yes
    k. Does the permittee apply round off rules uniformly? Yes

Comments:

II. Staffing and Training

1. Sufficient staff is provided to ensure all tasks associated with the operations, maintenance, sampling, and reporting requirements are performed? Yes

2. All facility operational and laboratory personnel meet the certification requirements of the State Board of Examiners Rules of Georgia for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysis:

Staff name	Class (if applicable)	Certification No.	Expiration Date
Mark Ryals	1	WW1-014424	6-30-13
Alvin Lang	1	WW1-014480	6-30-13
Michael Stapleman	2	WW2-014669	6-30-13
Joel Raymer	3	WW3-016399	6-30-13

3. Level of certification of person(s) responsible for the daily operation of the facility is in accordance with the permit? Yes

4. Records maintained on operator certification? Yes

Comments:

III. Plant Operations

1. Facility maintains operating logs for each treatment unit? Yes

2. Are all treatment processes properly operated and maintained? Yes

3. Does the facility have a written routine preventive maintenance program that includes the following: Yes
   a. Lubrication schedules? Yes
   b. Inspections? Yes
   c. Replacement of parts? Yes
   d. Tools or equipment needed? Yes

4. Does the facility have an equipment record and/or maintenance log that is maintained for each piece of equipment, including: Yes
   a. Maintenance performed? Yes
   b. Persons performing maintenance? Yes
   c. Date maintenance performed? Yes
   d. Major repairs and maintenance? Yes

5. Is a spare parts inventory maintained? Yes
   a. If applicable, describe:
      Computer program

6. Is a system in place to reorder spare parts as they are used? Yes
   a. If not, does the permittee have timely access to replacement parts?

7. Are the appropriate tools and equipment necessary for performing maintenance tasks provided? Yes

8. Is manufacturer's literature for all treatment units and equipment available to personnel? Yes

9. Is an Emergency Response Plan in place? Yes

10. Is there standby or auxiliary power or any other equivalent provision for critical plant components? Yes

a. Specify type of standby power system:

There is a backup generator on site that is run every Tuesday for an hour.

11. Are records maintained of standby or auxiliary power routine testing? Yes

12. Does the facility have an alarm system for power or equipment failures? Yes

a. Specify type and location of system for critical plant components:

SCADA

13. Has the facility bypassed since the last inspection? No

a. If yes, describe:

14. Is there a "checklist" evaluation of unit processes? Yes

15. Does the facility have an Operation and Maintenance Manual? Yes

16. Does the facility experience any hydraulic issues and/or overloading? No

Comments:

IV. Collection System

1. Any problems noted with the collection system or lift stations? No

Comments:

V. Sludge Disposal

1. Is the volume and concentration of solids removed from the plant monitored? Yes

2. Does the facility maintain records to document the quantity of solids removed from the facility equals the solids generated on an average day? N/A

3. Have sludge disposal procedures been developed to insure adequate year-round sludge disposal? Yes

4. Describe the method of sludge handling:

Goes to belt press 3 days a week and Southland Waste picks it up and takes to Broadhurst.

5. Does the permittee have an Approved Sludge Management Plan?

a. If yes, what is the sludge disposal method? (land application, third party contractor, compost, incinerator, heat dryer, etc.)?

The class B sludge goes to an approved Landfill.

Comments:

Reconnaissance Inspection

General Conditions

1. Facility is well maintained (grass cutting, all-weather access roads, buildings, equipment, severe corrosion of structures/process equipment, i.e.)? Yes
   a. If not, describe:
2. Gates, fencing, etc. are in disrepair? No
3. All treatment units and supporting equipment are in service and mechanically functioning properly? No
   a. If not, describe: The mechanical bar screen is being repaired, currently using manual.
5. Evidence of chemical, wastewater or sludge spills? No
6. Excessive noise? No
   (Give location)
7. Unusual or improvised equipment? No
8. Surcharging/overflowing of influent lines, overflow weirs or other structures? No
9. Overflows at alternate discharge points, bypass or any unpermitted discharges? No
10. Pipes from process/storage areas exhibit evidence of discharge to the ground or to surface water? No
11. Does the plant accept septage? Yes

Comments:

Preliminary Treatment at Headworks

1. Odors in treatment area? No
2. Describe the type(s) of treatment at this location (comment box)
3. Excessive debris on bar screen? No
4. Excessive screen clogging? No
5. Oil and grease buildup? No

6. Grit chamber clogged? No

7. Grit and screenings improperly contained and disposed? Yes

Comments:
Bar screen to grit removal

Mechanical Plant – Activated Sludge

1. Odor present? No
2. Dead spots present in aeration tanks? No
3. Brush aerators/surface aerators/blowers/diffusers operable? Yes
4. Compressor failure? No
5. Blower/aerator on timer? No
   a. Provide aeration cycle/interval: Continuous
6. Air rising in clumps (boiling)? No
7. Leaks in compressed air piping? No
8. Dark mixed liquor (grey or black) or dark tan foam? No
9. Thick billows of white, sudsy foam? No
10. Describe general water appearance Brown
11. Actual D.O. during visit 3.13
12. Mixed Liquor Suspended Solids (MLSS) concentration during visit 1790 and 2100
13. Excessive breakage of paddles on brush aerators? No

Comments:

Secondary Clarifiers

1. Odors present? No
2. Excessive gas bubbles or grease on surface? No
3. Build-up of solids in center well of clarifier? No
4. Overflow weirs fouled with algae growth? No
5. Overflow weirs appear unlevel? No
6. Short circuiting of flow or evidence of short circuiting of flow? No

7. Pin floc in overflow? No

8. Scum handling inadequate; scum rake ineffective or overloaded? No

9. Sludge floating on surface, clumping? No

10. Evidence of a solids washout? No

11. Poor maintenance of sludge pumps (leaking) or pump gallery? No

12. Sludge judge available at facility? Yes

13. Billowing sludge or sludge blanket too high? No

Provide depth below:

Clarifier(s) I.D.	2	1		
Depth of Clarifier(s):	20'	20'		
Depth of Sludge Blanket:	3"	3"		

Comments:

Sludge Handling

General Sludge Handling

1. Does the facility waste sludge? Yes

2. Are the sludge pumps out of service? No

3. Spilled sludge around dewatering units? No

4. Sludge runoff from plant site? No

5. Mechanical dewatering system failure? No

Comments:

Aerobic Digesters

1. Odors present? No

2. Excessive foaming or bad odor? No

3. Clogging in diffusers? No

4. Mechanical aerator failure? No

5. Dissolved Oxygen sufficient in digester? No

6. Digester overloaded? No

7. Adequate supernatant removal from sludge lagoons? Yes

8. Solids accumulation in tank? No

Comments:

Filter/ Belt Press

1. Odors present? No

2. Thin filter cake caused by poor dewatering? No

3. Sludge buildup on belts and/or rollers of filter press? No

4. Filter cake sticks to solids conveying equipment of filter press? No

5. Sludge blowing out of filter press? No

Comments:

Ultraviolet (UV)

1. Odors present? No

2. Quartz sleeves kept clean? Yes

3. Bulbs are all operational? Yes

4. Replacement bulbs quickly accessible? Yes

5. Effluent has high turbidity? Yes

6. Redundancy or back-up? Yes
   If yes, describe:

Comments:

Back-up bulbs are available.

Plant Effluent \ Outfall to receiving waters of the State:

1. Odors present? No

2. Outfall inaccessible? No

3. Outfall posted in accordance with Georgia Water Quality Control Rule 391-3-6-.06(17)? Yes

4. Outfall sign broken or not legible? No

5. Excessive solids, turbidity, foam, grease, scum, color or macroscopic

particulate matter?	No
6. Evidence of toxicity (dead fish, dead or impaired plants, etc.)?	No
7. Noxious odors downstream of outfall?	No
8. Sludge accumulation in stream bed or along bank (evidence of anaerobic sediments, blood worms, etc.)?	No
9. Downstream appearance significantly altered by effluent (color, turbidity, etc.)?	No

Comments:

Flow Measurement

General Flow Measurement

1. Number of primary influent flow measuring devices: 1
2. Number of primary effluent flow measuring devices: 1
3. Type(s) of measuring device(s): Magmeters
4. Flow measured at each location as required by Permit? Yes
5. Flow measurement error greater than ±10%? No

   a. Head measurement: 11.2 b. Instantaneous flow: 11.3

Comments:

Flumes

1. Size of flume: 12" Parshall Flume

2. Turbulence, boils, or other disturbances entering the flume?	No
3. Flume clean and free of debris and deposits?	Yes
4. Sidewalls smooth and vertical?	Yes
5. Proper flume head measurement?	Yes
6. Gauge legible?	Yes
7. Measuring device in appropriate level?	Yes
8. Broken or cracked?	No

9. Leakage around the flume? No

Comments:

Magnetic flow meter

1. Type of Magnetic flowmeter: Milltronics influent/ Bedgen effluent
2. Improperly functioning? No
3. Any electrical disturbances near the meter? No
4. Leakage around the meter? No

Comments:

General Safety

1. Life preservers near/around basins? Yes
2. Hazardous or no railings or grates? No
3. Open manholes or other hazards? No
4. Operational eye washes/emergency showers? Yes
5. Properly located and operational fire extinguishers? Yes
6. Emergency plan on file or posted? Yes
7. Personnel properly trained to respond to emergencies? Yes
8. Safety signs missing, faded, improperly located? No
9. Restricted access when facility is vacated? (Gates locked & buildings secure)? Yes

Comments:

Sampling

1. Samples are taken at sites specified in the permit? Yes
2. Locations are adequate for representative samples? Yes
3. Sampling and analysis completed on parameters specified in the permit? Yes

4. Sampling and analysis done at the frequency specified by permit? Yes

5. Sample collection procedures comply with permit requirements? Yes

6. Influent samples are collected prior to any return or recycle flows? Yes
   a. If not, please explain:

7. Effluent samples are collected after final treatment process? Yes
   a. If not, describe:

8. Composite sampling periods and frequencies are consistent with permit and flow proportioned? Yes

9. Composite samples are refrigerated or kept on ice (4 °C and 6 °C) during composite sampling period? Yes

10. Analytical procedures, sample containers, sample preservation techniques, and sample holding times are consistent with the techniques and procedures listed in 40 CFR Part 136? Yes

Comments:

The lab work is transferred to the Academy Creek Lab and properly logged.

Laboratory Quality Assurance

Certifications:

1. Analyst certified? Eugene LeCounte/ Myra Rhaney

2. Certification Number:WWL009862/ WWL014290

3. Facility uses accredited laboratory?

   Yes

4. Name of accredited laboratory: Test America/ ABC Research Lab/ Research and Analytical Lab

5. Accreditation number: GA00803/ FL00087/ NC00004

6. Documentation of accreditation is submitted with the first regulatory report of the calendar year? Yes

7. Parameters analyzed by accredited laboratory: Biosolids fecal, Priority Pollutant Scans, Toxicity

Comments:

pH

1. Method 4550-HB	
2. Sample analyzed within 15 minutes of collection?	Yes
3. Meter standardized using at least two buffers that bracket sample pH?	Yes
4. Record of meter calibration maintained?	Yes
5. Sample temperature recorded?	Yes
6. Buffer solutions expired?	No
7. Calibration record maintained for equipment used?	Yes
8. Sample location recorded?	Yes
9. Sample type recorded (grab or composite)?	Grab
10. Sample collection time recorded?	Yes
11. Sample collection date recorded?	Yes
12. Data sheet completed?	Yes
13. Time of analysis recorded?	Yes
14. Date of analysis recorded?	Yes
15. Analyst's name or initials recorded?	Yes
16. Name of the Standard Method or EPA procedure recorded?	Yes

Comments:

Dissolved Oxygen (DO)

1. Method 4500-0G	
2. Sample analyzed in situ?	Yes
3. Sample analyzed within 15 minutes of collection?	Yes
4. Calibration record maintained for equipment used?	Yes

5. Sample temperature recorded? Yes
6. Data sheet completed? Yes
7. Sample location recorded? Yes
8. Sample type recorded (grab or composite)? Grab
9. Sample collection time recorded? Yes
10. Sample collection date recorded? Yes
11. Time of analysis recorded? Yes
12. Date of analysis recorded? Yes
13. Analyst's name or initials recorded? Yes
14. Name of the Standard Method or EPA procedure recorded? Yes

Comments:

Total Residual Chlorine (TRC)

1. Method 4500 CLG
2. Sample analyzed within 15 minutes of collection? Yes
3. Curve developed regularly by analyzing standards? No
4. A blank analyzed with each sample group? Yes
5. Data sheet completed? Yes
6. Calibration record maintained for equipment used? Yes
7. Sample location recorded? Yes
8. Sample type recorded (grab or composite)? Grab
9. Sample collection time recorded? Yes
10. Sample collection date recorded? Yes
11. Time of analysis recorded? Yes
12. Date of analysis recorded? Yes
13. Analyst's name or initials recorded? Yes
14. Name of the Standard Method or EPA procedure recorded? Yes

Comments: